#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-000361 Address: 333 Burma Road **Date Inspected:** 08-Aug-2007

City: Oakland, CA 94607

**OSM Arrival Time:** 800 **Project Name:** SAS Superstructure **OSM Departure Time:** 1730 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Huang Wei No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** N/A

### **Summary of Items Observed:**

The CALTRANS Quality Assurance (QA) Inspector, Alfredo Acuna was present for the welding qualification testing pertinent for the welding qualification record (PQR) HP2007153-1 scheduled for this project. ZPMC, welder operator Xiang Jie was observed by the QA Inspector performing welding operations following the preliminary welding procedure specification PWPS-B-T-3221 for the PQR identified as PQR HP2007153-1. Base metal was designated as A-709 HPS 485W (Heat # 07101250N). ZPMC followed the Production procedure WPS criteria (AWS D1.5-2002 section 5.13) using the Submerged arc welding (SAW) process in the flat (1G) position with the 4.8 mm diameter designated as EM12K/AWS A5.17, brand name JW-3. The QA Inspector verified dimensions for the test coupon, amperages, voltages, travel speeds, preheat and heat interpass temperatures. The QA inspector witnessed 10 passes from layers 1 thru 5. The QA inspector performed random verifications of the welding parameters for a total of 10 passes. The QA inspector found that the welding parameters reported by Certified Welding Inspector with the Technical department Huang Wei appeared to be accurate and in accordance with the contract documents. ABF representative Welding Engineer Craig Knops was present during the testing. The welding of the PQR HP 2007153-1 was still in process at the end of the shift.

#### **Summary of Conversations:**

The QA inspector did not have any relevant conversation on this date.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

# WELDING INSPECTION REPORT

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**Inspected By:** Acuna, Alfredo Quality Assurance Inspector **Reviewed By:** Cuellar,Robert QA Reviewer